

DR. FELIX HAUROWITZ
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BLOOMINGTON, INDIANA, U.S.A.

July 29, 1959

Dear Joshua:

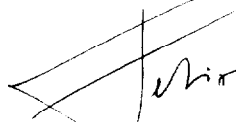
I am very sorry that you cannot come. I hope, however, that you may later *decide* ~~find~~ to come here to the symposium even if you do not participate as one of the speaker. I would appreciate very much to see you here at least as a discutant.

Thank you for the address of Nossal. I wrote him a second letter, but have no answer yet.

We seem to agree on persistence of Ag, Ab or AgAb complexes. The problem of the number of antibody patterns is certainly of crucial importance. I once calculated that 3-4 amino acid residues cannot form more than about 10^4 combinations. Linus Pauling objected to this by claiming that each of the triades or tetraads could exist in many different conformations. This would result in about 10^6 rather than 10^4 "ANTI" patterns. I see no way how to prove or disprove Pauling. It may just as well be that three given residues would always arrange in a unique spatial conformation. Then my estimate would be better than that of Linus.

Hoping to see you either here or at some other national meeting, I am,

sincerely yours

A handwritten signature in dark ink, appearing to be 'F. Haurowitz', written over a diagonal line that extends from the 'sincerely yours' text.

Felix Haurowitz